

# **Processed Blackberries: Industry In Distress**

## **The Justification For Market Intervention**

### **INTRODUCTION**

Blackberry production in the United States is concentrated in the Willamette Valley region of Oregon and in Clark County in the state of Washington. The two areas are adjoining, separated only by the Columbia River. This relatively small production area accounts for almost 85% of all blackberries grown in the United States and approximately 96% of the blackberries grown for processing. The rich soils, cool summer nights, and an ample water supply make this unique climatic zone ideal for producing large harvests of the highest quality blackberries in the world.

Oregon currently produces 98% of the blackberries grown in the two state region, but the state of Washington has the capability of expanding dramatically in the future. With a similar climate and close proximate to existing processing facilities in Oregon, there is the potential for Washington to expand into a major blackberry production area. The inclusion of Washington in the proposed marketing order is to maintain control of future growth, not current production.

The cultivated blackberry industry can be traced back as far as the 1930's. Blackberry varieties developed in Oregon, like the thornless Evergreen blackberry and the Marion blackberry (or Marionberry as it is commonly called), began to gain prominence in the market in the late 60's and early 70's. Blackberry tonnage produced in the states of Oregon and Washington now dwarf the production of all the other states combined.

While blackberries have always been popular in jams and pies, they are finding their way into an increasing array of value-added food products. The blackberry flavor does well in taste tests with young consumers and is fast becoming a vogue addition to a variety of food products ranging from muffins to smoothies. Recent studies have also proven that there are positive health benefits associated with eating blackberries. They rank above blueberries and black raspberries in some categories for their nutritive attributes.

## **INDUSTRY DESCRIPTION**

Blackberries are a perennial crop that are grown commercially on trellis systems that tend to be capital, labor, and management intensive. The high establishment costs of planting and trellising can add \$3,500 to \$4,000 an acre in additional investment to the already high cost of the premium farmland that is required for growing blackberries. Annual cultivation expenditures are also very high, primarily due to the amount of labor required and the costly harvest method. Total costs per acre to grow blackberries are between \$4,000 and \$6,000, depending on the variety and cropping system.

Due to their high capital outlay and intensive management characteristics, blackberries have historically been produced on relatively small acreages. Individual farms average just over 10 acres. Approximately 560 blackberry growers harvested 5,980 acres in 2002, yielding a total of 43,800,000 pounds.

Blackberry growers primarily market their crop to processing handlers, who in turn market the processed berries to value-added food product manufacturers. It is generally these manufacturers who actually incorporate the blackberries into retail products like pies, jams, syrups, and toppings. Some of the processors are vertically integrated and use the berries they handle to produce their own value-added product lines, but these entities are a small minority.

While most blackberry production goes to processor/handlers, there is a handful of growers who are processing and handling all of their farms blackberry production. These entities are still in the minority, but there is a recent surge in the number of growers marketing their crop in this way.

Two decades ago, there were more than 20 processor/handlers to whom growers could market their crop. There are now just nine major processors that handle approximately 93% of all the processed blackberries produced in the region. The balance is mostly made up of the growers who process and handle their own production. Economies of scale, advances in technology, and changing attitudes in the market have taken their toll on the small processors that dominated the landscape in the 80's.

The blackberry industry has an immense amount of potential to expand and flourish in the future. That potential can only be exploited if the industry idiosyncrasies that handicap it can be controlled. There is no reason that the blackberry industry could not someday rival blueberries or raspberries in terms of total domestic consumption.

## **CURRENT MARKET SITUATION: CRITICAL**

There are several contributing factors to the problems that are plaguing the blackberry industry and causing blackberry growers economic hardship. The combination of wildly fluctuating crop yields and prices, the inelasticity of the demand curve, and the effects of flat industry demand growth have taken an extreme financial toll on producers. It is these negative industry characteristics that the proposed marketing order would address through the use of the reserve pooling, volume control, and market research and promotion provisions allowed under a marketing order.

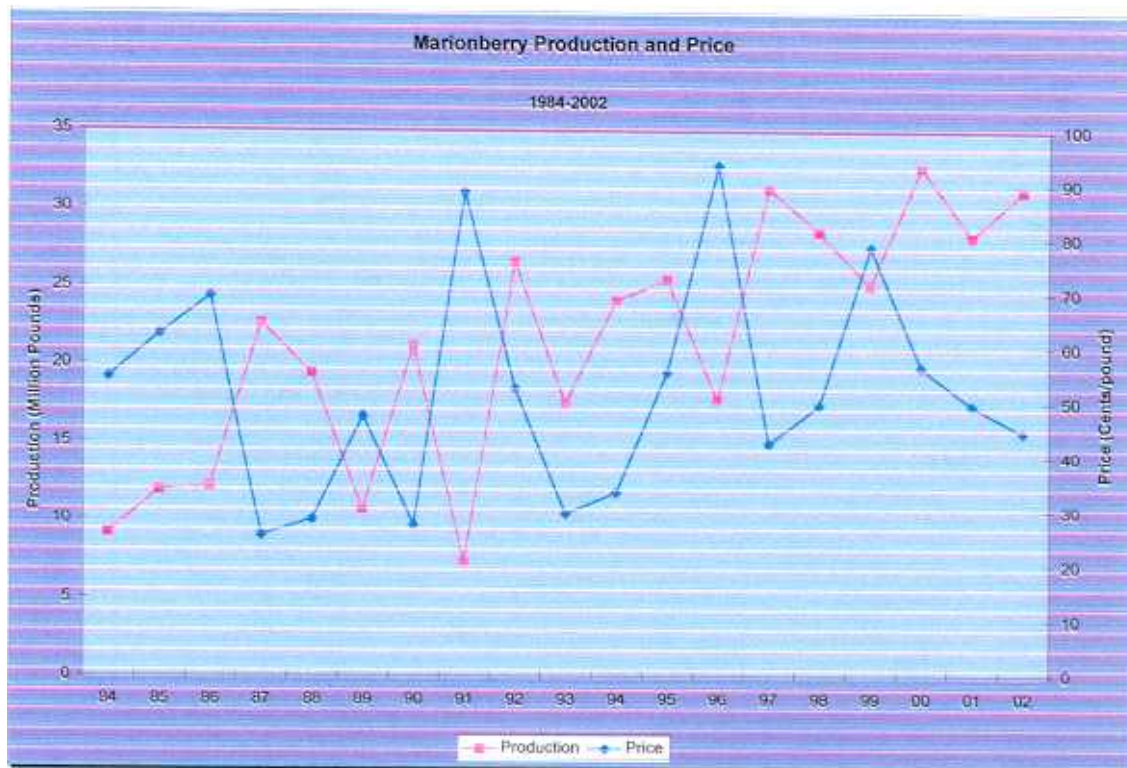
The Agricultural Marketing Agreement Act of 1937 was created to allow farmers to combat the kind of enemies that face the blackberry industry. In fact, the marketing order legislation seems to be tailor made for the blackberry industry. The limited geographic production region, high asset fixity required for production, inelastic market demand tendency, volatile price and production characteristics, and the small industry size are all conducive to the success of an implemented marketing order, if and when enacted.

The market problems outlined below, while relatively few, dramatically impact all participants in the industry. While growers tend to bear the brunt of the economic repercussions, handlers and end users are also negatively affected by adverse market conditions. A marketing order offers the opportunity for the industry to self-regulate and correct the conditions that are unhealthy.

### **Problem #1 - Market Fluctuations**

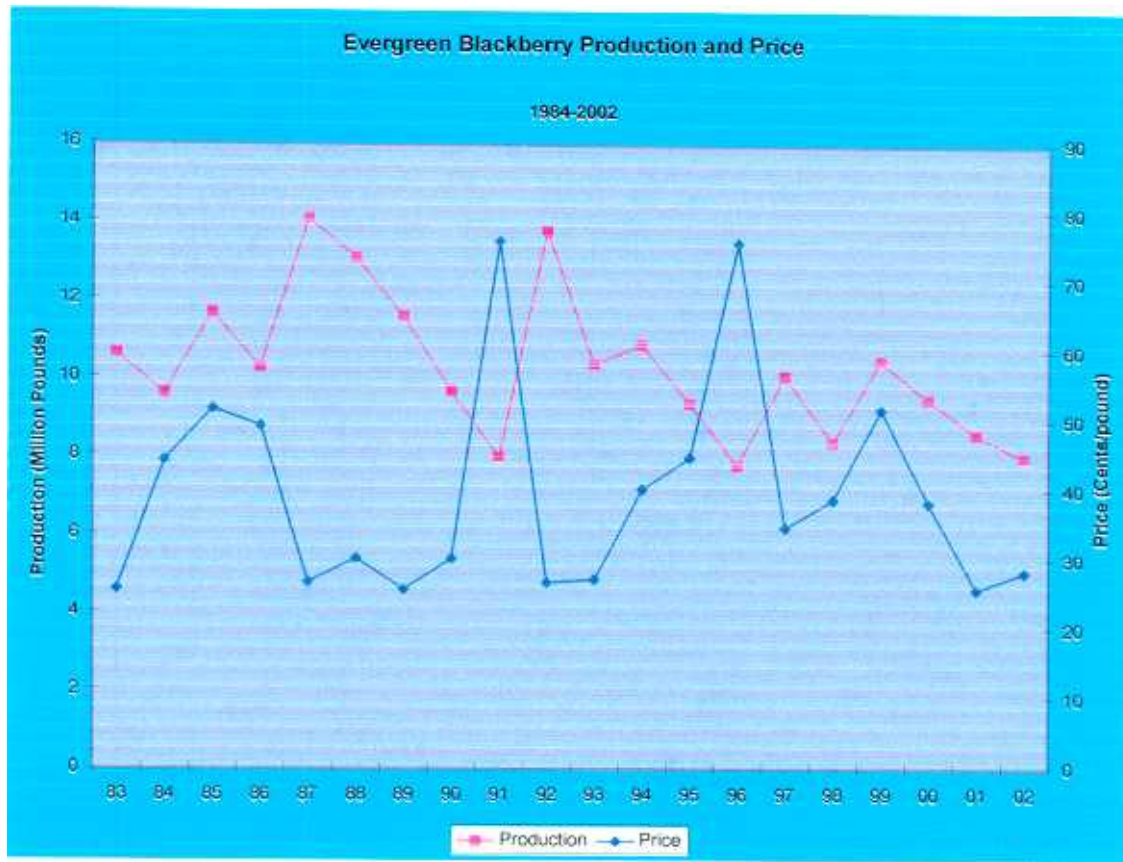
The blackberry industry has been marked by extreme fluctuations in production and price for decades. Marionberries, which account for two-thirds of all blackberry production, are extremely susceptible to both winter freezes in dormancy and to springtime frosts. Conversely, Marionberries also respond to ideal climatic conditions with greatly increased crop yields. The combination of those traits translates into crop yields that fluctuate wildly from year to year, sometimes by over 100%.

Grower prices, which are heavily dependent on crop size, fluctuate in a similar manner. Prices have risen by as much as 74% over average and dropped as much as 44% below average on a given year. The graph of prices and production of Marionberries (Figure 1) dramatically illustrates the fluctuations that have occurred since 1984.



**Figure 1**

The market fluctuations experienced by Marionberries tend to affect all other blackberry varieties as well. As the dominant cultivar in the industry, the price and availability of Marionberries has a strong influence on the price of the other varieties, even though they may not be as susceptible to the same weather related yield variations. To some degree, all blackberries tend to be substitutes for one another and the pricing moves accordingly. As you can see in the following graph, the price of Evergreen blackberries, the second largest cultivar, is also very erratic, even though the production levels are considerably more stable than the Marionberry. Together, Marionberries and Evergreen blackberries made up 86% of the total blackberry production in 2002.



**Figure 2**

Market instability, perpetuated by weather related events, harms the blackberry industry in a number of ways. Unpredictable production levels wreak havoc on processor/handlers who are trying to anticipate annual volume. Potential new users are driven away by the inability of the industry to provide a stable supply of blackberries at a stable price. For the same reason, manufacturers that currently use blackberries in their products are reluctant to expand usage. The volatile nature of the blackberry industry is counterproductive when it comes to increasing the demand for blackberries.

As an example, the Oregon Raspberry and Blackberry Commission led a concentrated effort to promote blackberry products just prior to the 1991 crop year. One large new user was on line to introduce a new product that was expected to utilize a large quantity of Marionberries. A devastating winter freeze that year reduced the crop of all blackberries to a small percentage of normal. The new user was not able to secure enough Marionberries for the project at a reasonable price and, consequently, scrapped the project. Nobody knows how many similar situations have occurred in the industry, but cumulatively it has had a severe dampening effect on demand growth.

## **What a Marketing Order Would Do**

Under the provisions of the proposed market order, volume controls and reserve pooling could be implemented to smooth out the extreme supply fluctuations that are characteristic of blackberry industry. Excess fruit generated from large seasonal increases in the production could be restricted from entering the current of commerce and could be diverted to a reserve pool. When the industry experiences periodic weather related crop damage, the reserve pool could be released into the market to temper the effects of a shortage. By leveling out fluctuations in supply, the dramatic price variance that the industry experiences should be eliminated as well.

Stabilizing the supply would afford blackberry users a certain level of confidence that blackberries will be available when needed. Once stabilization has been achieved, the industry could then work to create new demand in an organized fashion. If the major barriers to blackberry utilization are eliminated, mainly the erratic price and unpredictable availability, demand for blackberries can grow, uninhibited by those factors.

## **Problem #2 – Inelastic Demand Curve**

The price elasticity of demand for blackberries tends towards inelasticity. In practical terms, this means that, over time, the changes in the quantity demanded of blackberries is not very responsive to changes in the price of those blackberries. What has been observed over time is that the total revenue per acre for blackberries actually declines as more blackberries are produced. As an example, the Marionberry crop of 1996 was 17.9 million pounds and grossed \$16.78 million, an average of \$4,794 per acre. Yet, in 2002, the Marionberry crop was 31.5 million pounds, but grossed only \$14.06 million and averaged only \$3,222 per acre.

Unlike other commodities, large influxes in the supply of blackberries cannot be flushed through the market economically simply by lowering price. Largely due to the nature of the products that blackberries are used in, there is a point in which the market will not absorb any additional increases in supply without severe discounting. When prices eventually get low enough, blackberries find new market outlets. They become substitutes for other commodities, they find their way to new products, and they are purchased by entities that are forward purchasing future needs to lower their average cost.

Due to the 18 month production cycle for blackberries, production costs for blackberries are virtually fixed at the time of harvest. There are few production decisions that a grower can make at harvest time to mitigate the effects of the industries inelasticity. Due to the unpredictability of blackberry

production, information concerning crop size and market pricing are not available until months after the producer has committed his/her resources.

Merely knowing that the industry is inelastic can do nothing for the individual grower. The grower is at the mercy of industry conditions that will affect his/her total revenue and is powerless to effect any change. Even if a individual grower realizes that the market is inelastic and that decreasing the total quantity of blackberries marketed will increase his/her total revenue, an **individual** production or marketing decision to that end will only achieve the opposite. Unless **all** producers follow suit, an individual action will have an insignificant impact on the market price. The individual grower will ultimately reduce his/her total revenue by marketing fewer blackberries at the unchanged market price. The industry must collaborate as a whole to manage supply to effectuate an economic benefit to growers.

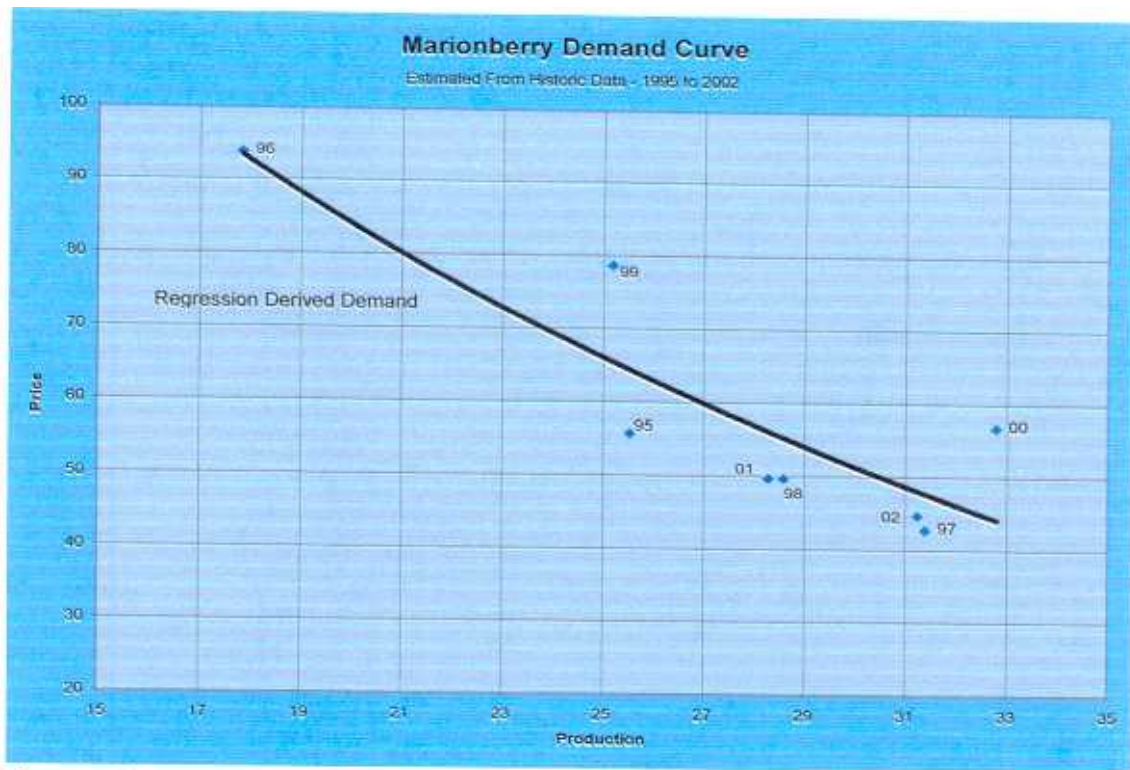
### **What a Marketing Order Would Do**

While growers are unable to do anything individually to mitigate the effects of inelastic demand, the volume control provision of the proposed marketing order will afford the industry a tool to corporately keep excess supply from entering the market. By regulating the quantity of blackberries that can be marketed, growers can attain price and total revenue levels that will be closer to parity than might be achievable under a free market system.

### **Problem #3 – Flat Demand Growth**

Over the last two decades, the number of acres committed to blackberry production in Oregon and Washington has increased from 3,120 to 5,980 acres, a 91% increase. The total tonnage produced has grown from 20.25 million pounds in 1983 to 43.8 million pounds in 2002, a 116% increase. Much of that increase in production was accompanied by a corresponding increase in the market demand for blackberries. The theoretical demand curve for blackberries shifted to the right throughout the years from 1983-95. Since 1995, however, demand appears to have changed very little. The following chart (figure 3) illustrates a theoretical demand curve for Marionberries derived from plotting production and price data from 1995 to 2002.



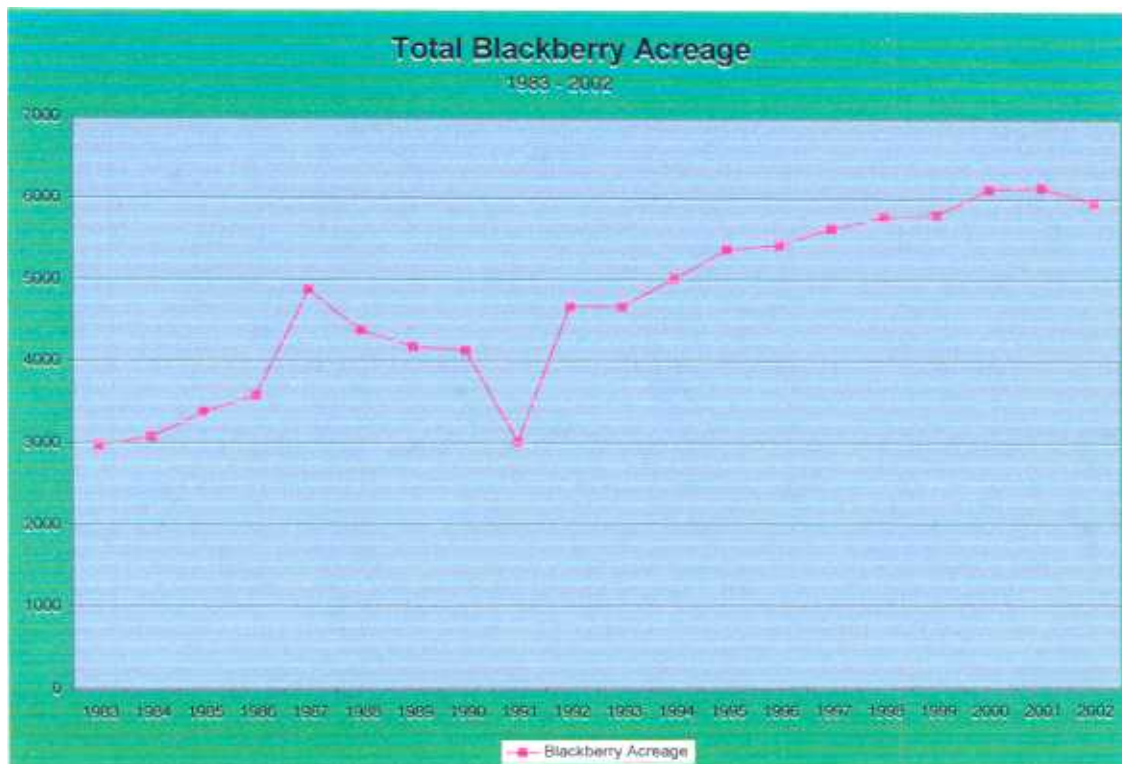


**Figure 3**

This demand curve illustrates how the blackberry industry has reached a plateau in demand growth. The two years that appeared to show some movement in demand above the curve, 1999 and 2000, both had excess supply of blackberries that were carried over to subsequent years. While not definitive, this chart is a representation of the problems that face the blackberry industry.

While demand has been relatively stagnant since 1994, acreage has continued to grow. As shown in Figure 4, the industry has added approximately 1000 acres, or 20%, from 1994 to 2002. When this increase in acreage, and hence production, was not met with a corresponding shift in demand, it meant that the industry would be relegated to dramatically reduce prices to market the crops produced. As discussed previously, with an inelastic demand curve, moving down the curve with an increase in supply





**Figure 4**

translates into shrinking total revenues for the industry as a whole and for each of the individual producers. This situation will persist until producers and/or acres leave the market and reduce total supply, there is an artificial reduction in the level of supply that is allowed to be marketed, or there is a real increase in market demand and the demand curve moves to the right.

Stimulating demand growth is the healthiest option for increasing financial returns for the industry. While other measures may have to be implemented in the short run to correct the industry course, any long run, sustainable strategy must include jumpstarting the demand for blackberries.

### **What a Marketing Order Would Do**

The proposed marketing order includes provisions for marketing research and promotion that could be implemented to achieve the goal of demand growth. To truly grow demand, other provisions of the order must first be utilized to assure potential blackberry users that the product will be consistently available at reasonable prices. When that is accomplished, comprehensive, industry-wide marketing research and promotion (including paid advertising) can exploit the attributes of the relatively unknown blackberry to expand its market.

## **Conclusion**

While the blackberry industry has been in disarray recently, it possesses a great amount of potential for future growth and profitability, if the problems that plague it can be turned around. The proposed marketing order has the capability of doing that. If implemented, the volume control and pooling offer a coordinated solution to the supply problems that hamstringing the industry. The opportunity to provide concerted industry marketing research and promotion afford hope for future growth. Most importantly, the proposed marketing order gives control of the domestic blackberry industry back to the industry participants.